OVERVIEW OF THE FEDERAL POWER ACT AND THE HYDROPOWER RELICENSING PROCESS — CHAPTER 2

The Federal Power Act (FPA) gives FERC legal authority to issue licenses to non-federal hydropower projects. As noted in Chapter 1, non-federal projects represent about two-thirds of the hydropower projects operating in the U.S. (1,633 of 2,356 projects). When a license expires for one of these projects, FERC can issue a new license of 30 to 50 years to either the existing licensee or a new licensee.[1] Before issuing a new license, however, FERC must conduct an assessment of the proposed project to ensure it represents the best public use of waterway resources. This relicensing process must give "equal consideration" to developmental and non-developmental values, including:

- Utilization of the site's hydroelectric potential;
- Potential benefits to interstate or foreign commerce;
- Adequate protection, mitigation, and enhancement of fish and wildlife (including their spawning grounds and habitat); and
- Other beneficial public uses, including energy conservation, irrigation, flood control, water supply, recreational opportunities, and other aspects of environmental quality.[2]

This chapter provides a descriptive overview of the federal legislation governing the hydropower relicensing process. It is intended for resource agency officials unfamiliar with either the legal basis for FERC's licensing authority, the opportunities for resource agencies to

[1] The FPA also gives FERC the authority to take over projects (with equitable compensation), but this has never occurred. In a recent relicensing proceeding, however, FERC denied a new license and ordered project decommissioning and removal. FERC, *Order Denying New License and Requiring Dam Removal*, Project No. 2389, November 25, 1997.

[2] FPA Section 4(e). Also see Federal Energy Regulatory Commission, *Hydroelectric Project Relicensing Handbook*, Office of Hydropower Licensing, Washington, DC, 1990, p. 16.

influence relicensing decisions, or the steps of the relicensing process itself. The chapter is structured as follows:

- We begin the chapter with an overview of FERC's relicensing responsibilities under the FPA, as amended by the Electric Consumers Protection Act. In particular, we highlight key sections of the FPA that affect FERC's evaluation of developmental and non-developmental waterway resources.

- We then describe FERC's responsibilities for evaluating the environmental impacts of its actions under the National Environmental Policy Act (NEPA).

- Next, we characterize how several other federal statutes can affect the relicensing process and specify how the statutes make it possible for resource agencies and other parties to influence FERC's relicensing decisions.

- We then review several key court cases that affect how FERC interprets relevant legislation and implements the relicensing process.

- Finally, we provide an overview of the major steps of the relicensing process itself, highlighting key points for intervention by resource agencies.

THE FEDERAL POWER ACT AS AMENDED BY THE ELECTRIC CONSUMERS PROTECTION ACT

Congress amended the FPA with the Electric Consumers Protection Act (ECPA) in 1986. Congress had become concerned that FERC's licensing proceedings were not adequately considering the value of fish and wildlife resources and other aspects of environmental quality. By enacting ECPA, Congress clarified that FERC's relicensing decisions must reflect a balanced analysis of developmental and non-developmental values.

> The [ECPA, 1986] amendments expressly identify fish and wildlife protection, mitigation, and enhancement, recreational opportunities, and energy conservation as nondevelopmental values that must be adequately considered by FERC when it decides whether and under what condition to issue a hydroelectric license for a project. …[P]ower development is not to be considered an absolute priority under the Act or given undue weight. It is intended that the Commission give significant attention to, and demonstrate a high level of concern for all environmental aspects of hydropower development, even, if necessary, to the point of denying an application on environmental grounds….[3]

[3] H.R. Conf. Rep. No. 934, 99th Cong., 2d. Sess. at 21-25, reprinted in 1986 U.S. Code Cong. & Admin. News 2496, p. 2537-2542. Also see H.R. Rep. No. 507, 99th Cong., 2d. Sess. at 22, reprinted in 1986 U.S. Code Cong. & Admin. News 2496, p. 2508-2509.

Congress changed FERC's hydropower licensing responsibilities in several important ways by passing ECPA. These changes and other FPA provisions relevant to resource agencies are primarily captured under four sections of the FPA:

- **FPA Section 4(e)** establishes that FERC must give "equal consideration" to developmental and non-developmental values in its licensing decisions. Section 4(e) also authorizes federal land managers to impose mandatory conditions on a FERC license for hydropower projects located on federal reservations.

- **FPA Section 10(a)** requires FERC to consider resource agency recommendations for ensuring that a project is best adapted to comprehensive plans for developmental and non-developmental resources.

- **FPA Section 10(j)** requires FERC to consider resource agency recommendations pursuant to the Fish and Wildlife Coordination Act to protect, mitigate damages to, and enhance fish and wildlife resources.

- **FPA Section 18** authorizes resource agencies to prescribe upstream and downstream fishway passage requirements.

Each of these FPA sections is described in more detail below to clarify FERC's current relicensing responsibilities and highlight the potential ways in which resource agencies can affect relicensing conditions and decisions.

FPA Section 4(e)

ECPA amended FPA Section 4(e) to ensure that FERC gives "equal consideration" to developmental and non-developmental values. ECPA added the following text to Section 4(e):

> In deciding whether to issue any license under this Part for any project, the Commission, in addition to the power and development purposes for which licenses are issued, *shall give equal consideration* to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality [emphasis added].[4]

In defining "equal consideration," Congress noted that FERC must "…give these nondevelopmental values the same level of reflection as it does power…", but this reflection does not "…necessarily result in their equal treatment."[5] Based on this guidance from Congress, FERC has interpreted that "equal consideration *does not mean* treating all potential purposes

[4] FPA Section 4(e).

[5] H.R. Conf. Rep. No. 934, 99th Cong., 2d. Sess. at 22.

equally or requiring that an equal amount of money be spent on each resource value, but it *does mean* that all values must be given the same level of reflection and thorough evaluation …" [emphasis included].[6]

In addition to establishing the "equal consideration" principle, Section 4(e) gives federal land management agencies authority to prescribe conditions on projects located within, or directly affecting, a federal reservation.[7] Resource agencies with jurisdiction over federal reservations include: U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and U.S. Bureau of Land Management.

Less than half the hydropower projects licensed by FERC are located on a federal reservation.[8] For these projects, Section 4(e) directs FERC to include resource agency conditions in the license; FERC may not alter or reject them. Where disputes about Section 4(e) conditions lead to judicial review, the conditions will be evaluated as to whether they are "reasonably related" to the protection of the reservation and whether they are supported by substantial evidence in the administrative record.[9]

FPA Section 10(a)

Under Section 10(a), FERC must consider a project's consistency with federal and state comprehensive plans for improving, developing, or conserving a waterway. For example, such plans might include a restoration plan for certain species of fish or improved management of the riverine environment. Prior to ECPA, Section 10(a) required FERC to ensure that adopted hydropower projects are "best adapted to a comprehensive plan for improving or developing a waterway…and for other beneficial public uses…." ECPA amended Section 10(a) to raise the status of fish and wildlife values in FERC's consideration of comprehensive plans. Specifically, Section 10(a) instructs FERC to solicit recommendations from resource agencies and Indian

[6] FERC, *Relicensing Handbook*, op cit., p. 16.

[7] For the purpose of the FPA, "reservations" are defined as "national forest, tribal lands embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired and held for any public purposes; but shall not include national monuments or national parks." FPA Section 3(2). This definition includes, for example, National Wildlife Refuges.

[8] Grimm, Lydia T., "Fishery Protection and FERC Hydropower Relicensing under ECPA: Maintaining A Deadly Status Quo," *Environmental Law*, Vol. 20, no. 929, 1990, p. 942.

[9] See *Escondido Mutual Water Company et. al. v. La Jolla Band of Mission Indians et. al.,* 466 U.S. 777 (1984). See also *Bangor Hydro-Electric Company v. FERC et. al.*, 78 F. 3d 659 (1996).

tribes (if affected by the project) on how to make a project more consistent with federal or state comprehensive plans. However, FERC is not obligated to include these recommendations in the license or explain its reasons for rejecting them.

FPA Section 10(j)

ECPA added Section 10(j) to the FPA to emphasize the importance of fish and wildlife resources and improve FERC's "balancing" of developmental and non-developmental values in licensing decisions. Section 10(j) provides:

> That in order to adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat) affected by the development, operation and management of the project, each license issued under this Part shall include conditions for protection, mitigation, and enhancement. …[S]uch conditions shall be based on recommendations received pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) from the National Marine Fisheries Service, the United States Fish and Wildlife Service, and State fish and wildlife agencies.[10]

FERC can alter or reject Section 10(j) recommendations by following prescribed procedures. Section 10(j)(2) allows FERC to reject a recommendation by publishing detailed findings explaining why it is "inconsistent with the purposes and requirements of [the FPA] or with other applicable provisions of the law." FERC may also reject a recommendation if the resource agency has not provided substantial evidence in support of its recommendation, or if FERC determines that other conditions will adequately meet the statutory requirements of protecting, mitigating damages to, and enhancing fish and wildlife. However, if FERC cannot make an adequate case against a Section 10(j) recommendation based on one of these provisions, the recommendation must be accepted.

Congress intended for Section 10(j) to increase the role of resource agency recommendations in FERC's relicensing proceedings. The House report on ECPA states:

> The bill clearly and unmistakably upgrades the status at FERC of recommendations of the National Marine Fisheries Service, the United States Fish and Wildlife Service, and the applicable State fish and wildlife agencies under the Coordination Act. Their role is not a veto over a project…but it is one of requiring heavy reliance and acceptance by FERC…. It is a procedural change at FERC with substantive effect.[11]

While Congress strengthened the role of resource agencies with the addition of Section 10(j), Congress stopped short of granting agencies the authority to impose mandatory conditions on FERC licenses. That is, unlike Section 4(e) and Section 18 "prescriptions" (see below), Congress provided a process by which FERC can alter or reject Section 10(j) recommendations.

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[10] FPA Section 10(j). The Fish and Wildlife Coordination Act is discussed below (see "Other Federal Statutes Affecting Relicensing").

[11] H.R. Report No. 507, 99th Congress, 2nd Session at 22.

FPA Section 18

Section 18 applies to any hydropower project that may affect the passage of fish species present in the project area (or species planned for introduction in the area). It authorizes the U.S. Fish and Wildlife Service and National Marine Fisheries Service to prescribe upstream and downstream fishway passage requirements.

> [FERC] shall require the construction, maintenance, and operation by a licensee at its own expense of such … fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.[12]

Because a fishway prescription is mandatory, FERC may not alter or reject it.

THE NATIONAL ENVIRONMENTAL POLICY ACT[13]

The National Environmental Policy Act of 1969 (NEPA) identified environmental protection as a major national policy objective. NEPA requires all federal agencies to evaluate the environmental impacts of their actions (or actions they permit). Federal agencies are directed to use the NEPA process to assess reasonable alternatives to proposed actions, avoid or minimize any possible adverse environmental effects, and identify practical means to restore and enhance environmental quality.

Among other responsibilities, NEPA requires that "all agencies of the Federal Government shall --

- utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

- identify and develop methods and procedures … which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

- include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --

  – The environmental impact of the proposed action;

[12] FPA Section 18.

[13] 42 USC Section 4321-4347.

- Any adverse environmental effects which cannot be avoided should the proposal be implemented;
- Alternatives to the proposed action;
- The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and
- Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."[14]

FERC's regulations for implementing NEPA establish that, for relicensing applications, the initial NEPA document prepared will be an Environmental Assessment (EA).[15] NEPA defines an EA as "a concise public document" that serves to "briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact."[16] If the EA suggests that the proposed project will have significant environmental impacts, FERC will prepare an Environmental Impact Statement (EIS).[17] Compared to an EA, an EIS is a more comprehensive study in which FERC must "rigorously explore and objectively evaluate all reasonable alternatives" for the project.[18] As part of this analysis, FERC must solicit and respond to resource agency and public comments on the proposed project. Preparation of an EA only requires FERC to involve resource agencies and the public "to the extent practicable."[19] If FERC's initial EA suggests no significant impacts, FERC will issue a finding of no significant impact.[20] In such cases, preparation of an EIS is not necessary.

[14] 42 USC Section 4332.

[15] 18 CFR Section 380.5.

[16] 40 CFR Section 1508.9.

[17] 42 USC Section 4332. NEPA instructs agencies to prepare an EIS for "major Federal actions significantly affecting the quality of the human environment." The term "human environment" is defined under 40 CFR 1508.14 as "the natural and physical environment and the relationship of people with the environment."

[18] 40 CFR Section 1502.14.

[19] 40 CFR Section 1501.4.

[20] 40 CFR Section 1508.13.

OTHER FEDERAL STATUTES AFFECTING RELICENSING

Although the FPA and NEPA establish the legislative basis for hydropower licensing proceedings and decisions, several other federal statutes can affect hydropower licensing. These statutes often provide opportunities for resource agencies to intervene in the licensing process and influence FERC's decisions. The statutes include:

- The Fish and Wildlife Coordination Act
- The Endangered Species Act
- The Clean Water Act
- The Wild and Scenic Rivers Act
- The Coastal Zone Management Act
- The National Historic Preservation Act

The role of these statutes in hydropower relicensing is described in more detail below.

The Fish and Wildlife Coordination Act[21]

The Fish and Wildlife Coordination Act (FWCA) requires federal agencies granting a license or permit for the control, impoundment, or modification of waterways to first consult with the U.S. Fish and Wildlife Service and appropriate state fish and wildlife agencies. This consultation should be made "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources."[22] FWCA also states that resource agency recommendations should be made "an integral part" of any report on the waterway project.[23] As discussed above, the enactment of ECPA reinforced this requirement through the addition of FPA Section 10(j), which directs FERC to include resource agency recommendations for the protection, mitigation of damage to, and enhancement of fish and wildlife in the conditions of a license.

[21] 16 USC Section 661-666c.

[22] 16 USC Section 662(a).

[23] 16 USC Section 662(b).

The Endangered Species Act[24]

The Endangered Species Act (ESA) provides a system for protecting endangered and threatened species and conserving the ecosystems on which they depend. The ESA requires that:

> Each Federal agency shall, in consultation with and with the assistance of the Secretary [of the Interior], insure that any action authorized, funded, or carried out by such agency…is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical….[25]

Under the ESA, various species are categorized by regulation as endangered or threatened species. In addition, the "critical habitat" for these species is designated. Where endangered or threatened species may be present in the area of a hydroelectric project proposed for relicensing, FERC may be required to conduct a biological assessment to identify species that could be affected by the proposed project.

The Clean Water Act[26]

The Clean Water Act (CWA) was enacted to protect the environmental quality of U.S. waterways. It provides the statutory basis for states to implement water quality standards, pollution discharge permitting, and other measures to protect water resources. Section 401 of the CWA applies to hydropower project (re)licensing. It requires an applicant to obtain certification from the state water quality agency that hydropower project discharges will be in compliance with the CWA's water quality standards.[27] Standards are designed to limit the impacts to water quality and protect beneficial uses of the waterway, such as water supply, fish resources, and recreation.

A hydropower project creates two types of discharge: (1) water (passing through the project); and (2) sediment and other debris that may result from project construction and modification. If these discharges comply with state water quality standards, the state water quality agency will certify the project and FERC can issue a license (as long as state water quality certification conditions are incorporated in the license). Conversely, if either of these discharges fails to comply, project certification will be denied and FERC may not issue a license.[28]

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[24] 16 USC Section 1531-1544.

[25] 16 USC Section 1536(a)(2).

[26] 33 USC Section 1251-1376.

[27] 33 USC Section 1341(a).

[28] If certification is not issued or denied within one year from the date of request, FERC considers the certification to be waived.

A recent U.S. Supreme Court interpretation of CWA Section 401 allows the state to regulate hydropower project operations and facilities, not just discharges, where the state finds that conditions are "necessary to assure" compliance with applicable water quality standards.[29] This includes water *quantity* as well as water quality. The Supreme Court ruled that the CWA allows state agencies to regulate minimum flow requirements, and that the Section 401 water quality permitting process does not improperly preempt FERC decisions associated with instream flow standards.

Other Statutes Relevant In Special Cases

Several other Acts may be relevant to dam relicensing under special conditions. These include:

- **The Wild and Scenic Rivers Act** provides for the protection and preservation of designated rivers and their immediate environments.[30] Rivers can be designated "wild and scenic" by an act of Congress or an act of a state legislature in a state where the river flows. Section 7(a) of the Wild and Scenic Rivers Act prohibits FERC from licensing construction of any project under the FPA on a wild and scenic river. However, FERC has relicensed some existing projects on wild and scenic rivers when the original project licensing preceded the designation of the river.[31]

- **The Coastal Zone Management Act** provides for the protection of coastal land, water, and other natural resources.[32] The Act requires that federal actions affecting a coastal zone's natural resources be consistent with the state's federally approved coastal management plan. In the event that a hydropower project affects coastal natural resources, conditions may be incorporated into a license in order to comply with the Act.

- **The National Historic Preservation Act** requires federal agencies to consider the impact of proposed actions on sites and facilities listed on, or eligible for, the National Register of Historic Places.[33] If the construction,

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[29] See *Public Utility District no. 1 of Jefferson County and City of Tacoma v. Washington Department of Ecology*, 121 Wash. 2d. 179, (1994).

[30] 16 USC Section 1271-1287.

[31] Hill, Jennifer, "Environmental Considerations in Licensing Hydropower Projects: Policies and Practices at the Federal Energy Regulatory Commission," *American Fisheries Society Symposium 16*, 1996, p. 191.

[32] 16 USC Section 1451-1464.

[33] 16 USC Section 470.

> removal, or relicensing of a hydropower project is likely to affect a historic resource, the Act requires FERC to give the appropriate state agency and the Advisory Council on Historic Preservation an opportunity to recommend conditions for the project.

RELEVANT COURT RULINGS

In addition to the FPA, NEPA, and other federal statutes, several court cases affect how FERC interprets relevant legislation and implements the relicensing process. Exhibit 2-1 summarizes these rulings.

The collective impact of the rulings has been to strengthen the role of intervening agencies in the relicensing process and to assert the importance of considering the broader environmental impacts of hydropower projects. Most notably, the Yakima decision is considered central because it explicitly acknowledged that FERC must treat relicensing as a new commitment of a resource (the river) that has other competing uses. Specifically, the court held that the FPA requires FERC to undertake the same level of assessment of fish and wildlife resources for a relicensing as it would for an original license.

> Relicensing is substantially equivalent to issuing an original license and one would assume that the FERC regulations governing the preparation of an EIS generally apply. Relicensing, then, is more akin to an irreversible and irretrievable commitment of a public resource than a mere continuation of the status quo. Simply because the same resource had been committed in the past does not make relicensing a phase in a continuous activity. Relicensing involves a new commitment of the resource, which in this case lasts for a forty-year period.[34]

The court also ruled that any inquiry into fishery issues must be conducted *prior to* the issuance of a license (or a renewed license) because fish protection issues are to be assessed as conditions of the licensing.

[34] 746 F. 2d. at 476-477.

Exhibit 2-1

KEY COURT RULINGS AFFECTING HYDROPOWER RELICENSING

Case	Year	Ruling
Udall v. Federal Power Commission (387 US 428)	1967	FERC's predecessor, the Federal Power Commission, issued a license to construct a hydropower project despite the Secretary of the Interior's request that licensing be postponed until measures for protecting anadromous fish could be studied. The Supreme Court ruled that, by ignoring the Secretary's request, the Federal Power Commission had failed to address all factors that affect the public interest, including "preserving the reaches of wild rivers and wilderness areas, the preservation of anadromous fish for commercial and recreational purposes, and the protection of wildlife."[35]
Yakima Indian Nation v. FERC (746 F. 2d. 466)	1984	FERC contended that it was not required to conduct an EIS on the continued operation of a hydropower project because there would be no change in the project's operations under the accepted new license, and therefore no change in the status quo. Moreover, FERC argued that its obligations to consider fishery resources were satisfied by an ongoing proceeding addressing the long-term problem of anadromous fish protection for the river. The Ninth Circuit Court ruled that FERC must undertake the same level of assessment of fish and wildlife resources for a relicensing as it would for an original license.
Escondido Mutual Water Co. v. La Jolla Band of Mission Indians (466 US 765)	1984	FERC rejected several conditions proposed by the Secretary of the Interior for the licensing of a hydropower project within one Indian reservation that would affect water flows to five other reservations. The Supreme Court ruled that under FPA Section 4(e), FERC must accept the Secretary's conditions without modification. Based on the *Escondido* decision, FERC concluded in its order issuing a license to *Lynchberg Hydro Associates (1987)* that the Secretary's FPA Section 18 conditions must be accepted without modification.
Tualip Tribes of Washington v. FERC (732 F. 2d. 1451)	1984	FERC attempted to characterize small scale dams as within the definition of a "natural water feature." This characterization would have allowed the dams to be exempted from regular licensing procedures under the Public Utilities Regulatory Act. The Ninth Circuit Court rejected this characterization and ruled against FERC.
Steamboaters v. FERC (759 F. 2d. 1382)	1985	The Ninth Circuit Court ruled that FERC failed to comply with NEPA requirements when it issued a license for a project without first completing an Environmental Assessment or providing an explanation for its decision to forego a more extensive Environmental Impact Statement.
No.1 of Jefferson County & City of Tacoma v. Washington Dept. of Ecology (121 Wash. 2d. 179)	1994	As noted above (see "The Clean Water Act"), the Supreme Court ruled that Section 401 of the Clean Water Act allows state water quality agencies to regulate the minimum flow requirements of hydropower projects if such regulation is necessary to assure compliance with water quality standards. The court held that the Section 401 water quality permitting process does not improperly preempt FERC decisions associated with instream flow standards.
Bangor Hydroelectric Company v. FERC (78 F. 3d. 659)	1996	The U.S. Court of Appeals for the District of Columbia issued an opinion striking down a mandatory license condition imposed by the Department of the Interior. Although FERC must incorporate, without modification, mandatory conditions prescribed by appropriate resource agencies, it is the responsibility of the resource agency to develop an administrative record that supports the prescribed conditions. This record must be filed with FERC before FERC makes its licensing decision.
State of Vermont v. FERC (129 F.2d. 99)	1997	The Second Circuit Court of Appeals rejected FERC's attempt to "define" mandatory conditions made by states under the Clean Water Act. FERC had attempted to exclude mandatory conditions that include schedules for maintenance.

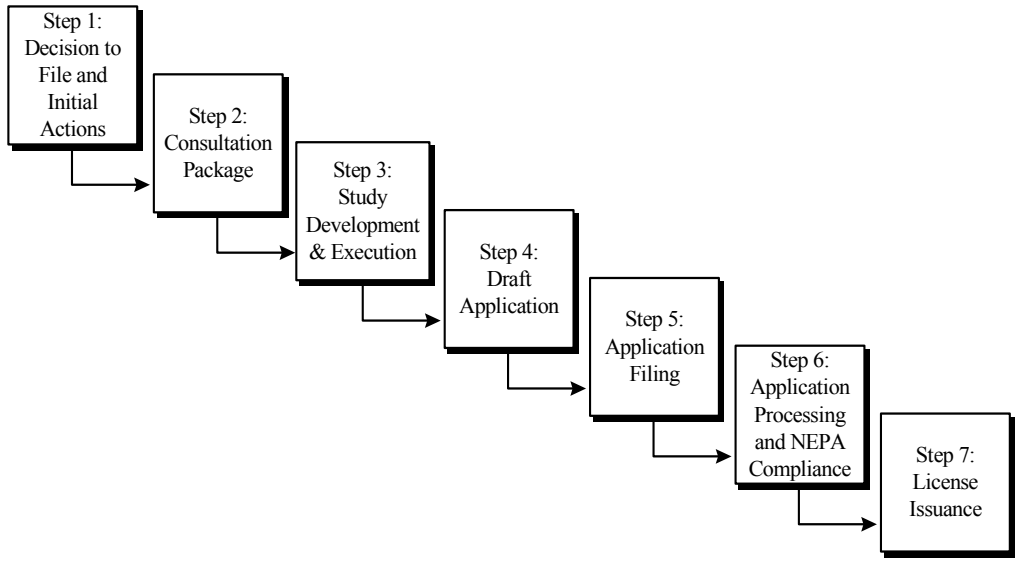
[35] 387 US at 450.

MAJOR STEPS IN THE RELICENSING PROCESS

FERC implements the relicensing process based on the FPA, NEPA, other relevant federal legislation and court rulings, and its own regulations. This section of the report provides a description of the relicensing process. To simplify, we have divided the process into seven major steps (see Exhibit 2-2).

Exhibit 2-2

MAJOR STEPS IN THE RELICENSING PROCESS



Source: Adapted from FERC, *Hydroelectric Project Relicensing Handbook*, 1990.

For each step, we highlight the relicensing responsibilities of the applicant and FERC, as well as points where resource agencies, Indian tribes, and the public typically participate in the process. We rely heavily on FERC's description of the relicensing process provided in its *Hydroelectric Project Relicensing Handbook*.[36] In the last section, we review an emerging variant of standard licensing proceedings referred to as the Applicant Prepared Environmental Assessment (APEA) process.

Step 1: Decision To File and Initial Actions

An existing licensee must provide notification to FERC whether it intends to file an application for a new license five to five-and-a-half years before license expiration. Upon receiving a notice of intent, FERC is responsible for promptly notifying the appropriate resource

[36] FERC, 1990.

agencies and providing public notice. In addition, FERC requires the existing licensee to make project information in the following areas available to resource agencies and the public for review:

- Construction and operation;
- Safety and structural adequacy;
- Fish and wildlife resources;
- Energy conservation;
- Recreation and land use; and
- Cultural resources.[37]

In general, the purpose of this information requirement is to ensure that interested parties have access to *existing* reports on the project and its impacts. For instance, FERC instructs the licensee to make the following information available on fish and wildlife resources:

- All existing studies documenting impacts of the project's construction and operation on fish and wildlife resources;
- All existing reports documenting the presence or absence of any threatened or endangered species and critical habitat located in the project area, or affected by the existing project;
- All fish and wildlife management plans prepared by the existing licensee or resource agency related to the project area; and
- All public correspondence relating to the fish and wildlife resources within the project area.[38]

Step 2: Consultation Package

Prior to filing an application, the applicant must consult with appropriate federal and state resource agencies to discuss study needs and potential mitigation measures. This consultation is initiated when the applicant submits a consultation package to the resource agencies that includes:

[37] For a complete listing of the project information required of the existing licensee, see 18 CFR Section 16.8 or FERC, *Relicensing Handbook*, op cit., p. 109-111.

[38] FERC, *Relicensing Handbook*, op cit., p. 110-111.

- Detailed maps of the project area and a general engineering diagram of the existing project and any proposed changes;

- A summary of the project's existing operational mode and any proposed changes;

- Identification of the environment affected or to be affected, the significant resources present, and the applicant's existing and proposed environmental protection, mitigation, and enhancement plans;

- Information and data on streamflow for the existing project and under any proposed changes; and

- Detailed descriptions of any proposed studies and the proposed methodologies to be employed.[39]

After resource agencies have had time to review the consultation package, the applicant must hold a meeting with agencies to discuss the proposed project, current and prospective environmental resource needs, and management objectives for the project area. In addition, the applicant and agencies need to determine study and data needs, appropriate study methodologies, and a format for the presentation of results.

Step 3: Study Development and Execution

Studies of proposed project alternatives should enable all participants in the relicensing to understand the potential tradeoffs between environmental resources, power production, and other benefits of the project and waterway resource. First, applicants are required to submit a standard environmental report as part of their application.[40] In addition, applicants must provide FERC with any information that FERC considers necessary or relevant to determine the environmental impact of the proposed project. FERC provides the following guidance on studies of environmental resources:

- Recreational studies should be designed to identify current and future recreational needs and how those needs can best be met.

- Fishery studies should evaluate existing resources and alternate project designs and operations to improve fish passage and habitat.

[39] 18 CFR Section 4.38 or FERC, *Relicensing Handbook*, op cit., p. 113-114.

[40] This information is submitted in Exhibit E of the application. Information requirements are stipulated in 18 CFR Section 4. For more information on Exhibit E, see FERC, *Relicensing Handbook*, op cit., p. 79-92.

- Water quality should be evaluated and alternatives considered to improve water quality, dissolved oxygen, and temperature levels.

- Other resources should be similarly assessed to identify resource needs and project potential for satisfying those needs.[41]

In addition to environmental studies, FERC notes that applicants might also develop studies to evaluate power needs, project operations and safety, and project economics.[42]

Step 4: Draft Application

After studies have been designed and executed, the applicant must prepare a draft application and distribute it to resource agencies for review. Resource agencies are allowed 90 days to comment on the draft application. If resource agencies disagree with the applicant's environmental protection, mitigation, or enhancement measures, the applicant needs to consult with resource agencies about more acceptable measures. These consultations must be documented by the applicant, including a summary of agreements reached with resource agencies and remaining disagreements.

Step 5: Application Filing

After consultations with resource agencies, the applicant can finalize its application for filing. As part of the environmental report, the applicant must include:

- Evidence of all consultation efforts, including the conclusions (and remaining disagreements) of consultations with resource agencies;

- All resource agency letters containing comments, recommendations, and proposed terms and conditions;

- Clean Water Act Section 401 certification, a certification waiver, or proof that the certifying agency has received the applicant's request for certification;

- An explanation of the project's compliance (or lack of compliance) with relevant comprehensive plans, along with resource agency comments regarding consistency;

[41] FERC, *Relicensing Handbook*, op cit., p. 52.

[42] For more information on these study areas, see FERC, *Relicensing Handbook*, op cit., p. 47-51.

- A description of how the applicant's proposal addresses issues raised by the public in initial consultations; and

- All letters from the public containing comments and recommendations.[43]

Applicants must submit a completed license application to FERC at least 24 months before the existing license expires. In addition, applicants are responsible for providing copies of the application to resource agencies and Indian tribes consulted previously.

Step 6: Application Processing and NEPA Compliance

The relicense application is reviewed for adequacy by a team of FERC engineering and environmental specialists. They may find it deficient and dismiss it, request corrections of deficiencies, or accept it with or without a request for additional information. FERC is required to provide public notice of accepted applications and identify a time period for comments and recommendations by resource agencies, Indian tribes (where appropriate), and the public. Agencies can also prescribe mandatory conditions. FERC provides this notice in the Federal Register, local newspapers, and directly to resource agencies and Indian tribes.

FERC is responsible for reviewing the comments and recommendations of resource agencies, Indian tribes, and the public, as well as responses from the applicant, to determine whether adequate information exists to conduct an environmental review under NEPA. If additional data and analyses are required, FERC requests that the applicant provide them within 60 to 90 days. When FERC deems the information adequate, it initiates an environmental review. FERC typically prepares an Environmental Assessment for relicense applications. Based on this assessment, FERC may conclude that relicensing the project: (1) will constitute a major federal action significantly affecting environmental quality, which therefore requires an Environmental Impact Statement; or (2) will not have a significant environmental impact.

As noted previously, FERC is required under FPA Section 10(j) to solicit recommendations from resource agencies on licensing conditions for the protection, mitigation of damages to, and enhancement of fish and wildlife resources potentially affected by the project. If FERC and resource agencies differ over appropriate conditions, they can negotiate to try and develop more acceptable conditions through a process known as "Section 10(j) dispute resolution." Under this process, FERC must include resource agency conditions unless it deems them inconsistent with the FPA or other applicable laws, or can demonstrate that its own conditions adequately protect fish and wildlife.

Step 7: License Issuance

The relicensing process concludes when FERC issues a new license, as long as no appeals or requests for rehearings are filed within 30 days after the license is issued. FERC's

[43] FERC, *Relicensing Handbook*, op cit., p. 57-59.

license order should contain information on the project works licensed, the project operation, and environmental, engineering, and compliance conditions.

An Alternative to the Traditional Relicensing Process

Section 2403(b) of the Energy Policy Act of 1992 established an alternative to the traditional relicensing approach, referred to as the Applicant Prepared Environmental Assessment (APEA) process. Under the APEA approach, an applicant can pay a third party, selected from a list approved by FERC, to develop a draft environmental assessment pursuant to NEPA *prior to* submission of a license application. In contrast to the traditional relicensing process, under which an environmental report is prepared by FERC staff or a FERC contractor *after* the license application has been submitted, APEA allows an applicant to file a draft environmental assessment with its license application.

The APEA process encourages the applicant (or the applicant's contractor) to work cooperatively with other stakeholders, including resource agencies, non-governmental organizations and the public, in the development of the environmental assessment and license application. The objectives of the APEA process are to:

- Front-load NEPA review and other licensing requirements, such as CWA Section 401 water quality certification and endangered species consultations;
- Facilitate the development of draft environmental reports and license applications that reflect and balance the interests of all stakeholders;
- Expedite the relicensing process.[44]

The APEA option offers an alternative relicensing approach that merges the traditional pre-filing consultation process with the environmental review process and more openly solicits the input of all interested stakeholders. In this way, APEA moves most of the post-filing review and comment activity into the pre-filing period, which provides for a more coordinated application and NEPA review process. Under the traditional approach, specific recommendations of resource agencies may be delayed until after the license is filed. The APEA process allows resource agencies to provide comments on the preliminary draft environmental

[44] FERC, *Guidelines for the Applicant Prepared Environmental Assessment (APEA) Process*, Office of Hydropower Licensing, 1996, p. 1.

assessment, including additional study requests, draft recommendations, and draft mandatory license conditions and prescriptions. Applicants then have the opportunity to review these comments and meet with resource agencies to discuss them.[45]

In practice, however, the APEA process may pose several problems for agencies such as the Department of the Interior (DOI).[46] First, the front-loaded NEPA review requires resource agencies to play a greater role in the environmental assessment process, which increases the administrative burden on these agencies. Conversely, the front-loaded NEPA review may limit FERC's environmental assessment responsibilities. By the time the environmental assessment and license application come to the Commission, the applicant, resource agencies, and other stakeholders have reached a settlement agreement on how environmental issues will be addressed.

Second, some DOI staff are concerned that the APEA process may undermine the Department's authority. The primary concern is that, in cases where the licensee has designated a finite pool of funds for environmental measures, stakeholder groups have accepted this level of funding as a set limit that cannot be exceeded. As a result, the groups have been willing to reach a settlement agreement before all of the environmental impacts of the relicensing are understood. Moreover, the stakeholder groups may be reluctant to collect more information on potential environmental impacts if they view it as an unnecessary expenditure of the limited pool of funds.

[45] Boltz, Suzanne E., et al., "Using the 1992 Energy Policy Act Provisions For Preparation Of Environmental Assessments," *ASCE Waterpower '95: Proceedings of the International Conference on Hydropower*, San Francisco, CA, July 25-28, 1995, vol. 1.

[46] Stolfo, Judith M., Staff Attorney, Office of the Regional Solicitor, "Comments on the Draft *Economic Analysis for Hydropower Licensing: Guidance and Alternative Methods,*" Memorandum to Ron Lambertson, Regional Director, U.S. Fish and Wildlife Service, Hadley, MA, September 11, 1998.